

**REMARKS**

The Office Action dated June 6, 2006 has been received and carefully reviewed. In the above amendment, claims 3-7 were cancelled without prejudice or disclaimer, claims 1 and 16-19 were amended, and new claims 20-26 were added. Reconsideration of the pending claims is respectfully requested in view of the above amendment and the following remarks.

**I. REJECTION OF CLAIM 18 UNDER 35 U.S.C. §112**

Claim 18 was rejected in the Office Action under 35 U.S.C. §112, second paragraph, as indefinite for failure to particularly point out and distinctly claim the subject matter regarded as the invention. In particular, the Office Action indicated a lack of antecedent basis for "the remote control device". By the above amendment, claim 18 has been amended to change "the remote control device" to "a remote control device" to address the antecedent basis issue, whereby claim 18 has now been rendered definite within the meaning of 35 U.S.C. §112, second paragraph, and reconsideration and withdrawal of the claim rejection is respectfully requested.

Applicant further notes that claim 18 has been rewritten by the above amendment into independent form including all the limitations of independent claim 1, and also that the claim 18 has not been narrowed by the above amendment and this amendment does not necessitate any further searching. Moreover, claim 18 was not rejected in the Office Action based on any prior art and amended independent claim 18 is therefore deemed to be allowable and notice thereof is respectfully requested.

**II. CLAIM REJECTIONS UNDER 35 U.S.C. §102**

Claims 1, 2, and 8 were rejected under 35 U.S.C. §102 as being anticipated by Marumo 5,531,644. Reconsideration and withdrawal of these claim rejections is respectfully requested for at least the following reasons.

Independent claim 1 has been amended above to recite a flying arrangement, comprising a non-pressurized hall with boundaries, as well as at least one flying unit that can start vertically and allows a person to fly freely within the hall, with the boundaries

preventing the flying unit from leaving the hall. Claims 2 and 8 depend from independent claim 1, further providing that the hall has a shape that is convex on all sides (claim 2), and that the flying unit is designed as a flying disk with a platform, in the center of which space for the person is provided and which also includes a lifting unit assembly (claim 8).

Importantly, the flying arrangement of claims 1, 2, and 8, does not involve a pressurized chamber or the concept of buoyancy for the free flight, and indeed, the boundaries serve to limit the excursion of the flying unit within the hall, but do not provide a pressure controlled chamber. In contrast, the space game floater apparatus of Marumo employs the principal of buoyancy within a pressure controlled, gas sealed shell 1 formed of gas-tight sheets 8 to create an artificial floating space 3 pressurized to 2-3 atmospheres. Thus, the items 7 of Marumo are not flying units, but rather "floaters" to assist in free floating of persons 6 riding therein by providing helium-based buoyancy in the pressurized space 3 rather than powered flight. The floaters 7 of Marumo employ a buoyancy vessel part 7a to provide buoyancy for the floaters 7 to achieve "light and smooth floating operations" (Marumo col. 2, lines 21-35; col. 3, line 3 through col. 4, line 17, Fig. 1). Therefore, Marumo does not teach or suggest a flying unit allowing free flying within a hall as in independent claim 1, but rather provides only buoyant floating operation. For at least this reason, Marumo fails to anticipate claims 1, 2, and 8. It is additionally noted with respect to the above amendments to independent claim 1 that Marumo fails to teach or suggest a non-pressurized hall as claimed. Thus, claims 1, 2, and 8 are neither anticipated nor rendered obvious by Marumo, and reconsideration and withdrawal of the rejections thereof is requested under 35 U.S.C. §102.

### **III. CLAIM REJECTIONS UNDER 35 U.S.C. §103**

Claims 3-7 and 9-15 were rejected under 35 U.S.C. §103 as being unpatentable over Marumo. Claims 16, 17, and 19 were rejected under 35 U.S.C. §103 as being unpatentable over Marumo as applied to claim 15, and further in view of Sassak 4,487,410. Reconsideration and withdrawal of these claim rejections is respectfully requested for at least the following reasons. Dependent claims 3-7 have been cancelled above without prejudice or disclaimer. With respect to claims 9-15, 16, 17, and 19, these claims depend

from independent claim 1 discussed above, and thus involve a non-pressurized hall. Marumo fails to teach or suggest this feature of claims 9-15, 16, 17, and 19, whereby Applicant requests reconsideration and allowance of these claims for at least this reason. Moreover, there is no motivation, suggestion, nor reasonable expectation of success in attempting to modify Marumo, alone or in combination with Sassek, to utilize a non-pressurized hall, as this would render Marumo inoperable for its intended purpose. For this additional reason, therefore, Applicant requests reconsideration and withdrawal of the claim rejections under 35 U.S.C. §103.

In order to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. MPEP 2143.03 citing to In re Royka, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974); and In re Wilson, 424 F.2d 1382, 1385, 165 U.S.P.Q. 494, 496 (CCPA 1970). In addition, where an independent claim is nonobvious under 35 U.S.C. 103, any associated dependant claim is also nonobvious. In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). A *prima facie* showing of obviousness also requires some suggestion or motivation in the references themselves, in the nature of the problem to be solved, or in the knowledge generally available to one skilled in the art to modify a reference or to combine references. MPEP §2143.01, citing to In re Kotzab, 217 F.3d 1365, 55 U.S.P.Q.2d (BNA) 1313 (Fed. Cir. 2000); In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d (BNA) 1596 (Fed. Cir. 1988). Motivation for combining references or modifying references may come from explicit statements in the art, implicit teachings therein, the knowledge of one of ordinary skill in the art, or from the nature of the problem to be solved. In re Thrift, 298 F.3d 1357, 1363, 63 U.S.P.Q.2d (BNA) 2002 (Fed. Cir. 2002). However, the showing of such suggestion or motivation must be clear and particular, rather than based on conclusory rationale. In re Lee, 277 F.3d 1338, 1343, 61 U.S.P.Q.2d (BNA) 1430 (Fed. Cir. 2002); In re Dembiczak, 175 F.3d 994, 50 U.S.P.Q.2d (BNA) 1614 (Fed. Cir. 1999). In addition, there must be a reasonable expectation of success in making the proposed modification or combination. MPEP §2143.02, See also Brown & Williamson Tobacco Corp. v. Philip Morris Inc., 229 F.3d 1120, 56 U.S.P.Q.2d (BNA) 1456 (Fed. Cir. 2000). Thus, where a proposed modification or combination or the prior art would render the prior art invention being modified unsatisfactory for its intended

purpose, then there is no suggestion or motivation to make the proposed modification. MPEP § 2143.01 citing to In re Gordon, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984).

Furthermore, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. MPEP §2143.01, citing to In re Mills, 916 F.2d 680, 16 U.S.P.Q.2d (BNA) 1430 (Fed. Cir. 1990); In re Fritch, 972 F.2d 1260, 23 U.S.P.Q.2d (BNA) 1780 (Fed. Cir. 1992).

When the cited reference Marumo is viewed in light of the above standard, all the recited elements of these claims are not taught or suggested, and no suggestion, motivation, or reasonable expectation of success is found for attempting modification of Marumo or the combination thereof with Sassek in accordance with the claims, whereby claims 9-17 and 19 are non-obvious under 35 U.S.C. §103. By the above amendment to independent claim 1, the dependent claims 9-17 and 19 provide a flying arrangement with a non-pressurized hall. Marumo, of course, fails to teach or suggest such a flying arrangement, being instead drawn to a floater apparatus that appears operable only in an artificial floating space 3 pressurized to 2-3 atmospheres.

With respect to claims 9-15, the Office Action states that "the specification of the present application indicated that the specifics of the flying units and its lifting units are shown in [sic] as examples and they do not appear to be a point of novelty of the claimed invention", without citation to any reference other than Marumo. Applicant therefore submits that no *prima facie* case of obviousness has been established with respect to claims 9-14 as the cited reference Marumo fails to teach or suggest a flying arrangement with a non-pressurized hall. For at least this reason, reconsideration and withdrawal of the rejections of claims 9-14 is requested under 35 U.S.C. §103. In addition, Applicant submits that a person of ordinary skill in the art would find no motivation in the cited references or elsewhere in the prior art for attempting to combine the floater apparatus of Marumo with a non-pressurized hall as claimed. Rather, upon viewing the entirety of Marumo, a skilled artisan would instead conclude that such an attempt would fail, since the floaters 7 of Marumo are designed to perform floating operations using a buoyancy vessel part 7a "producing buoyancy with the gas pressure in the artificial floating space 3" (Marumo col. 3,

lines 20-23). In this regard, Marumo appears to teach away from such a modification, and hence the subject matter of claims 9-15 is patentably distinct from Marumo for this additional reason. Further, as the features of dependent claims 9-14 are drawn to the lifting unit assembly and the lifting units thereof, these features further distinguish over Marumo. For instance, claim 9 recites a plurality of separate lifting units able to trigger a lifting effect that is distributed uniformly around the center, and therefore may assist an unskilled person to freely maneuver the unit for free flying. Claim 10 provides downward-operating lifting blowers, claim 13 recites fuel burning motors for driving the lifting units, and the lifting units of claim 14 include rocket boosters. The lifting unit assembly features of these claims are thus directed to accommodate free flying within the hall. The buoyancy vessel parts 7a and the propeller 20 and motor driven screws 23 of Marumo, on the other hand, are operable to provide *floating operation* and would not appear to a person of ordinary skill in the art as suggestive of providing free flying. In this regard, the floating operation of the floaters 7 of Marumo appears to be completely different from the flying experience provided by the flying units of the present claims. Regarding claim 15, the flying units are equipped with a position detection device, which can aid in correction of flight direction and velocity, for example, to avoid collisions between different flying units or between flying units and the hall boundary. The Office Action, in this respect, cites to no specific art, and instead states "the use of position-detection device in an amusement park is very well known in the art in order to monitor the position of the flying units around the hall." Applicant submits that no *prima facie* case of obviousness has been set forth regarding claim 15, and that this claim is patentably distinct from Marumo. For all these reasons, therefore, Applicant therefore requests reconsideration and withdrawal of the rejections of claims 9-15 under 35 U.S.C. §103.

Claims 16, 17, and 19 were rejected in the Office Action as being obvious with respect to Marumo as applied to claim 15, and further in view of Sassak 4,487,410. Reconsideration and withdrawal of these claim rejections is respectfully requested for at least the following reasons. Applicant initially notes that by the above amendment, the dependencies of claims 16, 17, and 19 have been amended whereby these claims no longer depend from claim 15, and thus no longer require a position-detection device. As

set forth in the above discussion relating to independent claim 1, Marumo fails to teach or suggest a non-pressurized hall, and moreover, there is no motivation, suggestion, nor reasonable expectation of success in attempting to modify the artificial floating space 3 or Marumo to be non-pressurized. Sassak fails to remedy this deficiency of Marumo, and for at least this reason, claims 16, 17, and 19 are not rendered obvious by the proposed combination of Marumo with Sassek. Sassek is directed to an amusement device having a spherical body 40 for holding a passenger, with the body 40 being raised to an elevated position in a tube 34 by means of *pressurized air* delivered beneath the body 40 by a turbine 26. The spherical body 40 in Sassek is thus raised by an air stream installed in a base which allows vertical raising and lowering of this spherical body 40. Importantly, Sassek does not provide free flight, and furthermore, the apparatus of Sassek, like that of Marumo, fails to teach a non-pressurized hall and appears to be inoperable in a non-pressurized hall, and thus the proposed combination of Sassek with Marumo fails to teach or suggest all the features of independent claim 1 and dependent claims 16, 17, and 19. For at least this reason, therefore, claims 16, 17, and 19 are patentably distinct from the proposed combination. Furthermore, Sassek also fails to provide suggestion or motivation for modifying Marumo in accordance with the aspects of independent claim 1 and claims 16, 17, and 19 depending therefrom, whereby the proposed combination fails to render claims 16, 17, and 19 obvious for this additional reason. Applicant therefore respectfully requests favorable reconsideration of claims 16, 17, and 19 under 35 U.S.C. §103.

#### **IV. NEW CLAIMS 20-25**

By the above amendment, new claims 20-25 have been added, which are also believed to be patentably distinct from the cited references to Marumo and Sassek. New dependent claims 25 and 26 depend from amended independent claim 1, and thus involve a non-pressurized hall which patentably distinguishes Marumo alone or in combination with Sassek as discussed above. For at least this reason, favorable consideration of claims 25 and 26 is requested. In addition, dependent claim 25 provides that the at least one flying unit has no inherent buoyancy, which feature is clearly neither taught nor suggested by Marumo. Moreover, any modification by which non-buoyant vessels are proposed for use

in Marumo would appear to defeat the primary purpose of Marumo, i.e., providing for floating apparatus. Claim 26 recites hall boundaries that are at least partially open, wherein Marumo appears to teach away from such boundaries. In this respect, opening the floating space shell 1 of Marumo would appear to render the floating apparatus 7 of Marumo inoperable. In the claimed hall, the boundaries prevent a flying unit from leaving the hall, but the boundaries do not need to be solidly closed, and these boundaries of the invention can be, for example, wire lattice forming a cage, a boundary enforced by remote control of the flying device, etc. as mentioned in the description. Thus, claim 26 is also believed to further distinguish over Marumo and/or Sassek and favorable examination thereof is respectfully requested.

New independent claim 20 has been added above, which is directed to a flying arrangement comprised of a hall with boundaries, and one or more non-buoyant flying units with a lifting assembly allowing the flying unit to start vertically and to fly freely within the hall, and accommodations for supporting at least one person in the flying unit for flying freely within the hall. In this respect, claim 20 and the associated dependent claims 21-24 patentably distinguish Marumo as the floaters 7 thereof are specifically designed for buoyant floating operation within the pressurized artificial floating space 3. For at least this reason, new claims 20-24 are believed to be allowable and favorable consideration thereof is requested. Moreover, dependent claim 21 recites that the hall is non-pressurized to further patentably distinguish the cited art, and claims 22-24 provide the above discussed features similar to claims 8, 15, and 16. Applicant therefore respectfully requests favorable examination of the new claims 20-16.

**CONCLUSION**

For at least the above reasons, the currently pending claims are believed to be in condition for allowance and notice thereof is requested.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should any fees be due as a result of the filing of this response, the Commissioner is hereby authorized to charge the Deposit Account Number 06-0308, PSEE200021.

Respectfully submitted,

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